

**BASIS FOR THE AMENDMENT**

The Claims have been amended as supported by the Claims as originally filed and the specification, for example, at page 6, last paragraph to page 7, line 22.

New Claims 20-30 have been added as supported by the specification as originally filed.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 11-30 will now be active in this application.

**INTERVIEW SUMMARY**

Applicants wish to thank Examiner Wood for the helpful and courteous discussion with Applicants' Representatives on August 20, 2008. During this discussion it was noted that the Examiner has not recognized that there are no hollow microspheres in Bartz et al (US 6,790,537). The Examiner has referred to col. 8, lines 24-26. However, there is only a disclosure of glass microspheres. There is no disclosure that these are hollow.

### **REMARKS**

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

Regarding the provisional double patenting rejection, the MPEP instructs the Examiner to withdraw the provisional rejection if it is the only issue remaining in one case and convert the provisional rejection in the other application to a double patenting rejection. MPEP 822.01.

The rejections of Claims 16 under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph, and under 35 U.S.C. § 101, are obviated by the amendment of the claims.

The rejections of the Claims over Bartz et al, alone or in view of Lively are respectfully traversed.

The present invention as set forth in **amended Claim 11** relates to a syntactic polyurethane prepared by the process, comprising:

reacting

a) a polyisocyanate component with

b) a polyol component,

the polyol component b) comprising the constituents

b1) a polyetherpolyol based on a difunctional initiator molecule,

b2) a polyetherpolyol based on a trifunctional initiator molecule and

b3) a chain extender,

**in the presence of**

**c) hollow microspheres,**

the polyol constituent

b2) comprising the constituents

b2-1) a polyetherpolyol based on a trifunctional initiator molecule  
having an average molecular weight of from 400 to 3500 g/mol, and

b2-2) a polyetherpolyol based on a trifunctional initiator molecule  
having an average molecular weight of from more than 3500 to 8000 g/mol.

**Amended Claim 15** relates to a process for the preparation of syntactic  
polyurethanes, comprising:

[[by]] reacting

a) a polyisocyanate component with

b) a polyol component,

the polyol component b) comprising the constituents

b1) a polyetherpolyol based on a difunctional initiator molecule,

b2) a polyetherpolyol based on a trifunctional initiator molecule and

b3) a chain extender,

**in the presence of**

**c) hollow microspheres,**

the polyol constituent b2) comprising the constituents

b2-1) a polyetherpolyol based on a trifunctional initiator molecule  
having an average molecular weight of from 400 to 3500 g/mol and

b2-2) a polyetherpolyol based on a trifunctional initiator molecule  
having an average molecular weight of from more than 3500 to 8000 g/mol.

**Amended Claim 16** relates to a method of insulating an offshore pipe, comprising:  
applying a reaction mixture comprising the following component a), b) and c) to an  
inner pipe of said offshore pipe;

reacting

a) a polyisocyanate component with

b) a polyol component,

the polyol component b) comprising the constituents

b1) a polyetherpolyol based on a difunctional initiator molecule,

b2) a polyetherpolyol based on a trifunctional initiator molecule and

b3) a chain extender,

**in the presence of**

**d) hollow microspheres;**

to obtain a layer of a syntactic polyurethane.

**Amended Claim 17** relates to an offshore pipe, comprising

(i) an inner pipe and, adhesively applied thereto,

(ii) a layer of a syntactic polyurethane prepared by the process of reacting

a) a polyisocyanate component with

b) a polyol component,

the polyol component b) comprising the constituents

b1) a polyetherpolyol based on a difunctional initiator molecule,

b2) a polyetherpolyol based on a trifunctional initiator molecule

and

b3) a chain extender,

**in the presence of**

**c) hollow microspheres.**

In contrast, there are no hollow microspheres in Bartz et al (US 6,790,537). The Examiner has referred to col. 8, lines 24-26. However, there is only a disclosure of glass microspheres. There is no disclosure that these are hollow.

Lively does not cure the defects of Bartz et al as he does not disclose hollow microspheres.

Further, the present invention discloses at page 1, line 26 to page 2, line 2:

In order to obtain good insulation properties of a foam system, it is advantageous to incorporate as many hollow microspheres as possible into the system. What is problematic is that high filler contents lead to system components which have high viscosities and are frequently thixotropic and may be nonpumpable and poorly miscible. These problems are intensified by virtue of the fact that, in the field of use of the polyurethanes, the total filler content usually has to be added to a polyol component since the hollow glass spheres are generally not compatible with the isocyanate because, owing to the water content and/or the alkali metal content at the surface of glass, the quality of the isocyanate is adversely affected.

It is an object of the present invention to provide a formulation for the preparation of syntactic polyurethanes which, on the one hand, permits a high load of hollow microfillers and thus leads to a low overall density and, on the other hand, permits the properties required for offshore insulation, such as good extensibility and a softening point above 150°C. Furthermore, it is also intended to achieve a high level of processing safety.

We have found that this object is achieved by preparing a syntactic polyurethane by reacting commercial polyisocyanates with a special polyol formulation.

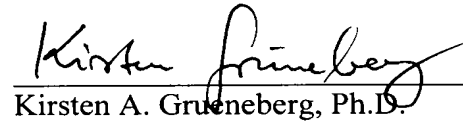
The achievement of a high load of hollow microfillers, a low overall density and, properties required for offshore insulation, such as good extensibility and a softening point above 150°C, are not disclosed in Bartz et al, alone or in view of Lively. Furthermore, there is no disclosure of the achievement of a high level of processing safety.

Therefore, the rejection of the Claims over Bartz et al, alone or in view of Lively are believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

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